

The Rise and Fall and Rise of **POINDEXTER SLOUGH**

higher in elevation than the Beaverhead or

Poindexter, allowing gravity to convey water

to irrigation canals. After fields were flooded

each spring to hydrate newly planted crops,

the standing water seeped into the water

table. In summer, the earth-cooled water

bubbled back up into nearby Poindexter

Slough, turning the long oxbow into a cool,

clear stream rich in underground minerals

A southwestern Montana community joins forces to bring a legendary trout stream back to life. By TOM DICKSON

his is the story of how a community came together to restore one of Montana's top trout waters.

Located just a few minutes' drive south of Dillon, Poindexter Slough—in western parlance, a "slough" is a riverside channel runs nearly 5 miles through the old Beaverhead River bed. Centuries ago the river naturally shifted a quarter mile west, leaving Poindexter as a long oxbow in the old basin, cut off from the new channel.

Starting in the 1890s, settlers moved in and began growing alfalfa, drawing water from nearby Blacktail Creek. The stream sits

that fueled aquatic insect production. "Technically it wasn't a spring creek, but it functioned like one," says Zach Owen, watershed coordinator for the Beaverhead Watershed Committee.

As on the nearby Beaverhead, all those bugs fattened up brown and rainbow trout,

making Poindexter a top draw for both nonresident and local anglers. From the 1950s through the early 21st century, Dillon residents could fish the "spring" creek before or after work and stand a good chance at tying into a 3-plus-pound brown. Then things started to go south.

FROM FLOOD TO PIVOT

Starting in the 1980s, farmers and ranchers began switching from flood to pivot irrigation, which watered crops with 300-yardlong sprinklers that move around a central pump. "Pivots" use water more efficiently and require less human labor, explains local rancher Carl Malesich, who chairs the BWC.

Tom Dickson is editor of Montana Outdoors.

Yet because it puts far less water on the land itself, producing almost no underground seepage, pivot irrigation is less beneficial for Poindexter trout. The "springs" that fed the slough for a century dried up.

To sustain both trout and crops, more water was diverted from the nearby Beaverhead via Poindexter Slough into Dillon Canal, which provides additional irrigation water for area landowners. Unfortunately, with that river water came river silt.

During the 1990s and early 2000s, a steady influx of silt began filling Poindexter's pools, robbing trout of hiding places and winter habitat. Pools up to 6 feet deep turned into shallow flats that warmed quickly under the hot summer sun. Silt also filled in gravel where aquatic invertebrates lived and trout spawned. The loss of flood irrigation in nearby fields also removed the steady supply of cold, oxygenated water bubbling up from underground that invigorated aquatic life.



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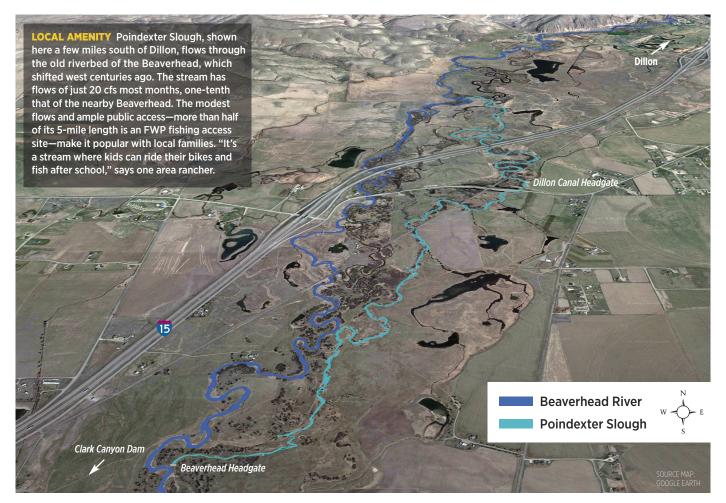
Though the area continued to support abundant white-tailed deer, beavers, muskrats, songbirds, and waterfowl, big trout fared poorly. Matt Jaeger, Montana Fish, Parks & Wildlife fisheries biologist in Dillon, says that while total trout numbers stayed

roughly the same over the ensuing decades, at about 1,500 per mile, the percentage of trophy browns dwindled. Before the 1980s irrigation shift, about 5 percent of Poindexter's trout were over 18 inches long. By the 1990s, that had dropped by more than half to less than 2 percent. "The habitat no longer supported big trout," Jaeger explains.

Anglers went elsewhere. FWP creel surveys showed fishing use plummeted from more than 4,000 "angler days" per year to around 600. Angler satisfaction dropped too, from "excellent" to "poor." One of the nation's most famous trout fisheries had all but collapsed.

WORKING TOGETHER

Around 2014, the Beaverhead Watershed Committee began seeking solutions to Poindexter Slough's silt problem. Under the motto "Working together for the river we share," the committee and partners raised nearly \$1 million for the project with bake







MAKING A COMEBACK For a century, water from flood irrigation in surrounding hayfields seeped below ground, only to bubble back up into Poindexter, creating spring creek-like conditions and a world-class fishery. After flood irrigation was replaced by sprinklers (above left) starting in the late 1980s, the "springs" dried up. More water was brought in from the Beaverhead River, and with it silt that filled in pools and smothered aquatic insect habitat (above right). In recent years, the Beaverhead Watershed Committee and local supporters raised nearly \$1 million to pay for narrowing the channel by half and deepening pools (below left and right). Periodic high flows from the Beaverhead through a new, enlarged headgate flush silt out of the stream. The result has been a higher percentage of trophy brown trout than biologists have seen in years.







sales, grants, and private donations. Major partners included the Beaverhead Conservation District, FWP's Future Fisheries Habitat Improvement Program, Dillon Canal Company, and local businesses. The committee hired Bozeman-based Confluence Consulting, an aquatic engineering and design firm. The company determined that narrowing the slough by 50 percent and providing "flushing flows" of 200 cfs every five years or so would mimic historical spring runoff flows. The periodic flushes would keep sediment moving, deepen holes, and clean substrate gravel. At all other times the stream would run at its normal 20 to 50 cfs.

From 2015 to 2018 a new, larger headgate was installed at the upstream end of the slough to bring in heavy flushing flows. Downstream, the Dillon Canal's diversion and headgate were replaced to eliminate a silt-holding backwater and a barrier to upstream-moving trout. Excavators and bulldozers dredged tons of sediment from pools, rerouted and then narrowed channels, and added tons of gravel to the newly configured stream. Crews planted willows, whose deep roots would hold contoured banks in place.

POINDEXTER THRIVES

At one point when funding for the Poindexter Slough Restoration Project ran low, local contractors R. E. Miller & Sons Excavating continued working at no charge. "That's just one example of how the community came together to make this project happen, and it shows what you can accomplish when a trout stream restoration is designed to meet the entire needs of a community," Owen, the watershed coordinator, says.

Today, Poindexter Slough is thriving. Riffles have clean gravel and pools are deep. Young willows have taken root. The water zips along at a steady clip, providing habitat for trout and irrigation water for downstream fields. Jaeger says overall trout numbers are down a bit from five years ago, "but the percentage of big fish is much higher."

The biologist notes that Poindexter Slough's days as one of Montana's premier "spring" creeks ended with flood irrigation. "Now it's more like a high-quality side channel of the Beaverhead," he says.

Which is a no small thing. The Beaverhead remains one of the state's most productive trout fisheries, some years producing more brown trout over 18 inches per mile than any other in Montana, including rivers up to 10 times larger. "But for Poindexter to properly function ecologically and be part of that world-class fishery, it needs a regular silt flush," Jaeger says. "Thanks to the community rallying around this project, that's now happening." 🦘